Appendix F
Archaeological Sites and Isolated Finds

Jurisdictional Wetland and Protected Species Reconnaissance of Proposed Facility Site and Associated Parcels

PREPARED FOR: Larry Robinson/Range Fuels, Inc.

PREPARED BY: Melanie Wiggins/CH2M HILL

DATE: July 24, 2007

Purpose

This technical memorandum (TM) presents findings from site visits conducted to evaluate the presence of wetlands or other waters of the United States that require delineation and potential permitting in accordance with Section 404 of the Clean Water Act (CWA). This TM also reviews the evaluations related to the occurrence of species listed as threatened or endangered or proposed for listing under the Endangered Species Act (ESA) of 1973, as amended, or potentially suitable habitat for listed or proposed species in the project area. Regulation of waters of the United States is through the Savannah District of the U.S. Army Corps of Engineers (USACE), who also would make the final determination of regulatory wetland jurisdiction, and verification of report findings. The U.S. Fish and Wildlife Service (FWS) is responsible for the implementation of the ESA. CH2M HILL conducted an evaluation of the proposed facility site (Figure 1 and Figure 2) March 29, 2007. An evaluation of an adjacent parcel for planned tank farm and rail lines was conducted on April 6, May 30, and June 29, 2007. This TM represents the professional opinion of CH2M HILL regarding the presence or absence of wetlands and other waters of the United States and their boundaries within the study area and the presence or absence of protected species or their potentially suitable habitat within the study area.

Wetland Determination Methodology

Wetland Definition

Wetlands for the purpose of this study were defined as:

> *"...those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas"* (USACE, January 1987, pg. 12).

This definition identifies three essential characteristics possessed by wetlands: 1) hydrophytic vegetation; 2) hydric soils; and 3) wetland hydrology.

Waters of the United States

The term "waters of the United States" has broad meaning and incorporates both deepwater aquatic habitats and special aquatic sites, including wetlands, as follows (33 *Code of Federal Regulations* [CFR] Part 328.3(a)):

"1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

2. *All interstate waters including interstate wetlands;*

3. *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:*

   Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

   From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

   Which are used or could be used for industrial purpose by industries in interstate commerce;

4. *All impoundments of waters otherwise defined as waters of the United States under the definition;*

5. *Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;*

6. *The territorial seas;*

7. *Wetlands adjacent to waters, (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section;*

8. *Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR 123.11 (m) which also meet the criteria of this definition) are not waters of the United States.*

9. *Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA."*

For the purpose of this TM, discussion of "waters of the United States" occurring within the project area will be separated into wetlands and non-wetland waters. Non-wetland waters refer to all waters that do not meet the wetland criteria (hydrophytic vegetation, hydric soils, and hydrology), as defined in the 1987 Manual (USACE, 1987). Lakes, ponds, impoundments, and permanent and intermittent streams outside of wetlands are commonly included as non-wetland waters. Recent federal court rulings have limited the scope of CWA jurisdiction such that isolated wetlands and ephemeral streams are not considered waters of the United States. However, the determination of CWA jurisdiction lies with the USACE.

Site Descriptions

The proposed facility site is two parcels totaling approximately 150 acres. Approximately 65 of the 150 acres would be developed for the project and the remaining acreage would be left as greenspace.

The main facility site is approximately 120 acres in an industrial park that has been previously cleared, with the exception of the areas surrounding wetlands and non-wetland waters, where a 30-100 foot buffer of mature trees, dominated by red maple (*Acer rubrum*) sweetbay magnolia (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*) and willow oak (*Quercus phellos*), remains (Figure 3). A stream originates from a spring/seep in the northeast portion of the property. This stream, approximately two feet wide, flows from the northeast to the southwest and is joined by two additional streams within the property boundary, a perennial stream and an intermittent stream that flows only in response to an offsite water discharge. The stream exits the property to the southwest through a culverted road crossing. The wooded area immediately adjacent to the channel that runs northeast to southwest exhibits characteristics of wetlands with hydrophytic vegetation, hydric soils and positive indicators of wetland hydrology. This forested wetland extends approximately 30-40 feet from the stream channel on both sides.

Existing infrastructure on the property includes a dirt road and sewer lines/manholes on the northwest and northern portions of the property. Much of the northern and western areas of the site are vegetated with grasses dominated by broomsedge (*Andropogon virginicus*). The southern and eastern portions of the site are bare dirt, with one area in the southern portion that has been recently seeded and mulched. The northeastern portion appears to have burned in the fall or winter, probably to remove logging debris from recent harvest activities. This area contains an emergent wetland dominated by black willow (*Salix nigra*) and two species of rush (*Juncus* spp.). The soils in this area had redoximorphic features characteristic of hydric soils and were saturated to the surface.

The proposed site for the rail spur is within an existing industrial area containing a concrete batch plant with a two-lane paved road bisecting the property. A small (approximately 1 foot wide) ephemeral stream runs between the area of the proposed loadout racks and the existing railroad. An area of forested wetland is present immediately to the north and south of the ephemeral channel, after it passes Parkview Drive. This wetland contained royal fern (*Osmunda regalis*), soft rush (*Juncus effusus*), sweet bay magnolia (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*), willow oak (*Quercus phellos*) and red maple (*Acer rubrum*). Soils in the area had redoximorphic features characteristic of hydric soils and were saturated to within three inches of the surface.

The property that contains the proposed chip mill site, is immediately adjacent to the facility site the north and is approximately 30 acres. An unpaved road bisects the property from east to west. Approximately 5 acres along the southeastern boundary of the secondary site was planted with wheat during the May site visit which had been harvested by the June site visit. The remainder of the site is hardwood forest dominated by oaks. There are two small areas of forested wetlands in the parcel. The first is located on the western half of the property and is estimated to be less than 0.5 acre in size. A second forested wetland area is located to the north of the unpaved road on the property. Both wetland areas are located outside of the area that would be used for the chip mill.

Protected Species

The threatened and endangered species evaluation included a literature search and field survey. The literature search included a review of the FWS and the Georgia Department of Natural Resources (GA DNR) databases for potential and known locations of protected species.

The GNHP database contains records of occurrences of eight rare, threatened, and endangered (RTE) species in Treutlen County. Of the eight RTE species, six have state protection status. None of the species known from Treutlen County have federal protection status. Table 1 lists these eight protected species, their protection status, and their typical habitats.

Table 1 Rare, Threatened, and Endangered Species in Treutlen County, GA

Species	Common Name	State Status	Habitat
Animals			
Spotted Turtle	*Clemmys guttata*	SP	Heavily vegetated swamps, marshes, bogs, and small ponds; nest and possibly hibernate in surrounding uplands
Ironcolor Shiner	*Notropis chalybaeus*		Coastal Plain streams and floodplain swamps
Plants			
Pineland Barbara Buttons	*Marshallia ramosa*	SP	Altamaha Grit outcrops; open forests over ultramafic rock
Cutleaf Beardtongue	*Penstemon dissectus*	SP	Altamaha Grit outcrops and adjacent pine savannas; rarely sandridges
Yellow Flytrap	*Sarracenia flava*	SP	Wet savannas, pitcherplant bogs
Ocmulgee Skullcap	*Scutellaria ocmulgee*	SP	Mesic hardwood forests; bluff forests
Ohoopee Bumelia	*Sideroxylon macrocarpum*	SP	Dry longleaf pine woods with oak understory; often hidden in wiregrass
Wire-leaf Dropseed	*Sporobolus teretifolius*		Longleaf pine-wiregrass savannas, pitcherplant bogs

Notes:
SP: Listed as protected by the State of Georgia

None of the species listed in Table 1 were observed on either property.

Although not reported from Treutlen County, nine gopher tortoise (*Gopherus polyphemus*) burrows were identified on the facility site and the proposed chip mill site (Figure 3). Gopher tortoises inhabit sand hills, dry hammocks, longleaf pine-turkey oak woods, and old fields. The burrows were located along the northwest border of the main facility site and adjacent to and south of an unpaved road on the proposed chip mill site. Gopher tortoise burrows are often inhabited by other species and these dens are commonly used by the indigo snake, a federally protected species, where the species co-occur. No gopher tortoises

were identified during the site visit, nor were any other animal species seen near their burrows.

Conclusions and Permitting Requirements

CH2M HILL identified four streams with adjoining wetlands on or adjacent to the two properties. Current site construction layouts would avoid encroachment on any of the streams or wetlands identified during the site visits. The current undersized, culverted stream crossing of Commerce Drive will be replaced with a larger culvert capable of handling stream flows from the site during heavy rainfalls. This culvert replacement would need to be permitted with a pre-construction notification (PCN) submitted to the USACE for authorization under the CWA Nationwide Permit (NWP) program before the start of the project. The NWP program has a time limit of 45 days for processing by USACE following its receipt of a complete application. Should the District Engineer decide to require mitigation, the application would not be deemed complete until after receipt of an acceptable mitigation plan. A delay in the USACE coordination regarding potential mitigation could result in delays to the project implementation.

References

Georgia Department of Natural Resources. Rare species and Natural Community Information. Accessed from http://georgiawildlife.dnr.state.ga.us/content/displaycontent.asp?txtDocument=89&txtPage=6.

U.S. Army Corps of Engineers. January 1987. *Corps of Engineers Wetlands Delineation Manual*. Environmental Laboratory, Department of the Army.

Attachments

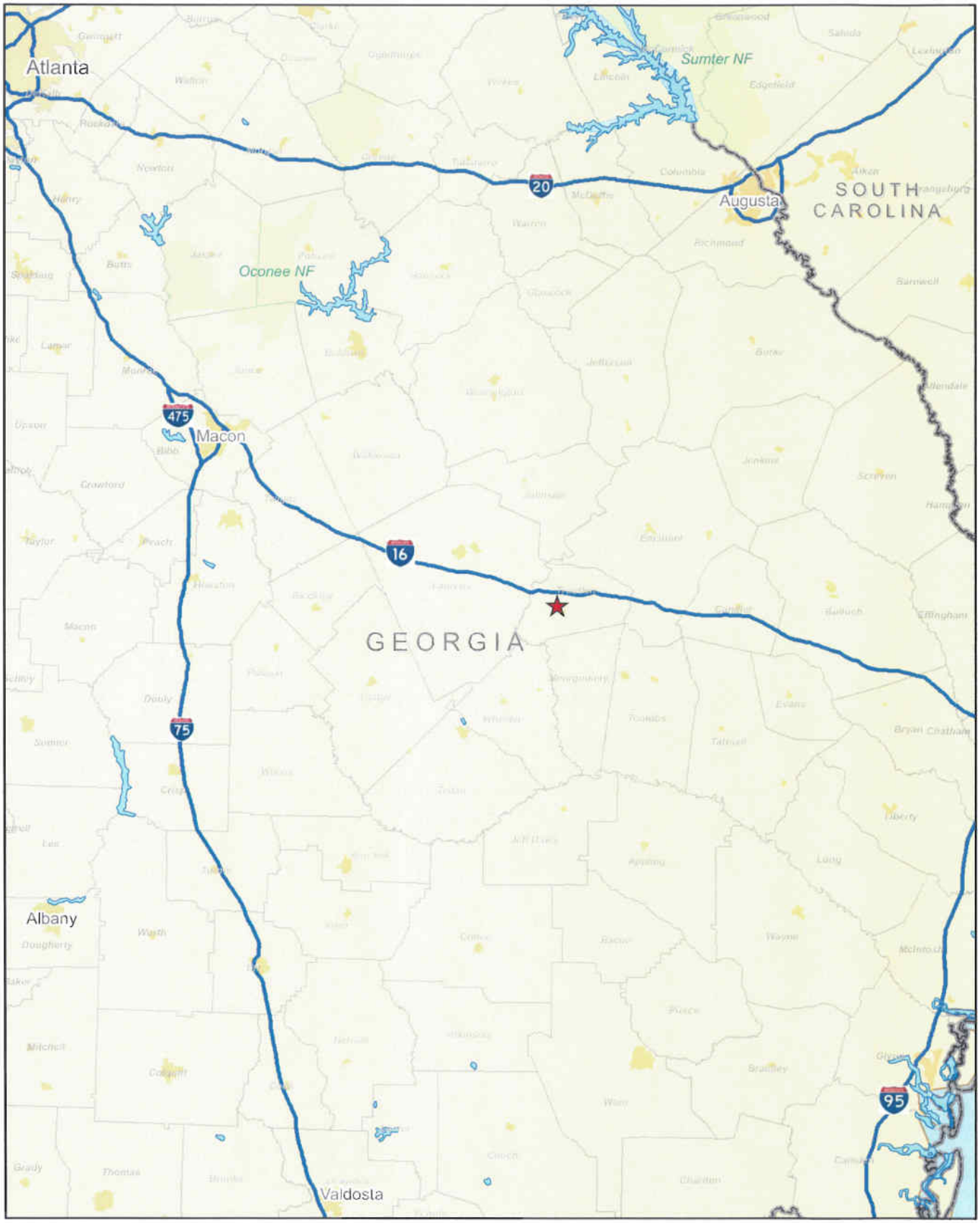

FIGURE 1
Project Vicinity
Range Fuels – Treutlen County, GA

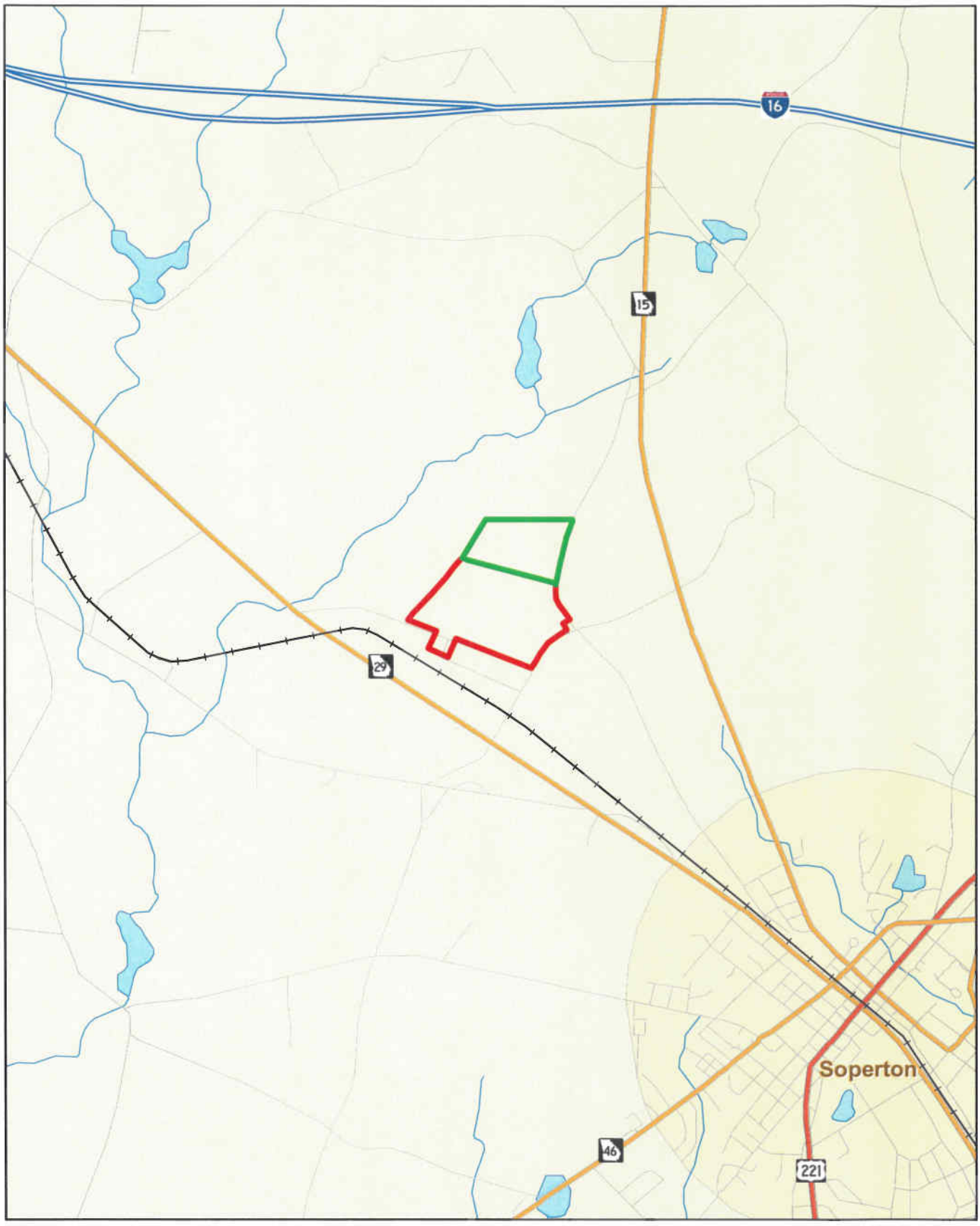

FIGURE 2
Project Location
Range Fuels – Treutlen County, GA

\\PEACHTREE\PROJ\RANGEFUELSINC\352035\FIGURES\MXD\FIG_1_2_PROJECT_LOCATION.MXD FIG_1_2_PROJECT_LOCATION.PDF 7/25/2007 12:39:00 KALLEN4

CH2MHILL

FIGURE 3
Wetland and Gopher Tortoise Locations
Range Fuels, Soperton, GA

\\boomer\G\Projects2\RangeFuels\mxd\Gopher_Burrow.mxd; Date: 07/25/07; User: DDickman